Installation Instructions for Engineered Bamboo

IMPORTANT: PROCEED WITH A VISUAL INSPECTION OF THE BOARDS BEFORE INSTALLATION. ONCE INSTALLED, THE BOARDS ARE CONSIDERED ACCEPTED BY THE INSTALLER AND THE HOME OWNER.

PLEASE READ THE ENTIRE INSTALLATION INSTRUCTIONS BEFORE PROCEEDING WITH THE INSTALLATION OWNER/INSTALLER RESPONSIBILITY.

Bamboo flooring is a beautiful and unique product of nature, which is characterised by distinctive variations in grain and colour both within each board and from board to board. These natural variations in colour and grain are not flaws, but are a part of the natural beauty and uniqueness of Bamboo flooring. These inherent variations should be expected and serve to enhance the natural beauty and enduring charm. Engineered Bamboo is manufactured in accordance with accepted industry standards, which permit a defect tolerance not to exceed 5%. The defects may be of a manufacturing or natural type.

It is understood that;

- The installer assumes all responsibility for final inspection of product quality. This inspection of each board should be carried out prior to installation. Carefully examine the flooring for colour, finish and quality before installing. Use reasonable selectivity and hold out or cut off pieces with glaring defects whatever the cause. All such inspections should be conducted in finished lighting conditions, particularly in areas that will be exposed to sources of natural light. If the flooring is not acceptable, contact your retailer immediately.
- Before beginning installation of any Bamboo flooring products, the installer must
 determine that the environment of the job site and condition and type of the sub-floor
 involved are acceptable, ensuring that it meets or exceeds all requirements which are
 stipulated in the Engineered Bamboo installation instructions which follow.
 The retailer declines any responsibility for job failures resulting from or associated with
 inappropriate or improperly prepared sub-floor of job site environment deficiencies.
- Prior to installation, the installer/owner has final inspection responsibility as to grade, manufacture and factory finish. The installer must use reasonable selectivity and hold out or cut off pieces with deficiencies.
- The use of stain, filler or putty stick for the correction of defects during installation should be accepted as normal procedure.
- Should any individual piece be doubtful as to grade, manufacture or factory finish, the installer should not use the piece. Of course, replacement materials of boards not installed will be afforded in this instance by the retailer, provided the defect is considered as a genuine manufacture defect.
- When Engineered Bamboo is ordered, allow approximately 5%-10% for wastage and off-cuts, depending upon size or layout of the room or installation area. (Please note: diagonal installations may require additional wastage allowances.)
- Please note that Engineered Bamboo engineered floors must be installed in a
 regulated and livable environment to prevent possible damage not covered by
 warranty. As such, Engineered Bamboo should not be installed more than 2 weeks
 prior to occupation of the home. The floor is designed to perform in an environmentally
 controlled structure. Warranty exclusions include, but are not limited to surface
 checking resulting from low humidity, cupping or convexing (doming) of boards or
 the presence of mildew or discolouration from extreme sub-floor moisture or poor
 cleaning/maintenance regimes.

JOB SITE INSPECTION & ACCLIMATISATION

- Engineered Bamboo flooring can be installed below, equal or above ground level.
- Do not install in bathrooms, laundry, toilets or areas subject to regular moisture or water.
- In a new construction, Bamboo flooring should be one of the last items installed. All work involving water or moisture (plumbing, acoustic ceilings, wall lining etc.) Should be completed prior to Bamboo flooring being installed. Heating and air systems should be fully operating maintaining a comfortable room temperature.
- Flooring should not be delivered until the building has been closed in and cement work, plastering, painting and other materials are completely dry. Concrete and plaster should be cured and at least 60 days old. Check basements and underfloor crawl space to be sure they are dry and well ventilated to avoid damage caused by moisture.
- Handle with care. Do not stand packs on their ends.
- Do not store directly on concrete or near outside walls. Cartons should be placed in the installation area.
- Extremes in humidity levels in the home must be prevented all year long. Bamboo is a living product which reacts to humidity level variations. During summer, where the humidity level is usually at its highest point, the Bamboo is expected to expand

as it absorbs moisture from the air. These variations must be dealt with adequate dehumidification. As for winter, when the heating system is working, the humidity level is lower. It is then recommended to use a humidifier to minimise the extreme effects of shrinkage.

JOB SITE INSPECTION & ACCLIMATISATION

When installing Engineered Bamboo, we recommend the following installation tools - Expansion wedges, a pulling iron and a tapping block. You will also require a jigsaw, pencil, hammer, tape measure, sharp 'Stanley' type knife and small hand tools associated with wood working.

Along with your Engineered Bamboo you'll need underlay and enough trims to complete your floor. Colour matched or aluminum trims are available in a range of shapes, profiles and colours from your local Engineered Bamboo retailer.

STEP BY STEP INSTALLATION INSTRUCTIONS

Engineered Bamboo is installed as a 'floating' floor. That is, that the panels are joined together via a click joining system to each other and float over an approved underlay and damp proof.

A successful installation will rely heavily on strict adherence to these instructions. The two most common causes of failure are uneven subfloors, and inadequate expansion to the perimeter of the floor.

An uneven sub-floor may lead to movement of the flooring underfoot and within the joining system, resulting in excessive noise, which often sounds like 'cracking' or 'creaking'.

Preparation:

The first thing that you need is to ensure that the sub-floor or surface that the Bamboo is being installed over is level. Using a 1 m straightedge, the sub-floor level should not exceed 3mm over 1 lineal metre in any direction. Remember, uneven floors may lead to movement and noise, so it is necessary to assess the levelness and get it right. Timber floors can be sanded level and concrete floors or existing floor coverings can usually be leveled using a cement based self-leveling compound. Engineered Bamboo can not be installed over carpet or carpet underlay but can be installed over well bond vinyl, cork or ceramic tiles if sufficiently level.

Before installing any floor, a moisture level measurement of the sub-floor is very important to know so that we can choose the correct installation procedure(s). If the moisture level is above 70% relative humidity as measured by an approved moisture meter that complies with the current Australian ATFA codes, you must first install a 200um minimum plastic moisture proof membrane or sheeting. Where the membrane edges meet, they must overlap by 300mm and the joins must be sealed using a waterproof tape. All walls and vertical fixtures must have the membrane turned up and then trimmed back to the appropriate level depending on skirting and/or beading to be installed.

Door frames and architraves should be undercut prior to commencing installation using a scrap of flooring and a long flexible hand saw.

Work out the trims to be installed as some trims are easier to install prior to the flooring. This will be dependent on the direction of the trim to the flooring and the type of trim to be installed.

Installing the First Three Rows:

Select a starting wall that is long and visible, the first three rows will be installed parallel to this wall. Install the first row of plastic and/or underlay as required then install the first row, tongue (male) to the wall to assess the straightness of the starting wall. If the starting wall is undulating or uneven, square this row off to the other side of the room using a tape measure and scribe the first row of boards to cater for the endulations while accommodating a uniform expansion gap. In terms of the required expansion/contraction gap, low humidity environments like South Australia and Mildura for example, will require a gap of 5-10mm. Regions such as Melbourne and Sydney for example, where the humidity is generally stable, a gap of 10-12mm will be required. A gap of 15-20mm may be required in high humidity regions such as Northern NSW and Queensland.

Expansion generally occurs in the width of a board. If the installation area measures 7 to 12 metres in width, expansion joins must be installed. This reduces the overall width so the floor now becomes compartmentalised, allowing now smaller areas to move independently of each other thereby reducing floor growth or shrinkage problems.

Engineered Bamboo may grow by over 3mm per lineal metre in the width, so make sure you leave enough gap to allow for such expansion. The wider the floor, the bigger the gap that may be required.

Now lay the first row directly against the wall. Engage the end joints by rotating into position (we will space off the first three rows later). Cut the end board and leave the correct gap that is required: 10mm is a rule of thumb. Fit a suitably sized spacer at the start of the row to set the gap required.

The off-cut from the last board in the first row now starts your second row, providing it's longer than 300mm. If not, a new board will need to be cut to begin the second row. Now install the first board of the second row by rotating the long join into position. The end joint is then closed by gently dropping into place. Continue installing the floor left to right using the off-cut from row 2 to begin row three. (Note: Remember to ensure that you stagger end joins by greater than 300mm.) Any small gaps present can be filled using a caulking compound in an appropriate colour. We can now slide these three rows off the starting wall and install the suitably sized spacers against the starting wall.

The Body and the Final Row:

Continue installing the floor left to right using the rotate and tap technique described earlier. The final row will need to be trimmed to fit using a jigsaw and brought into place using a pulling iron. Remember to allow an adequate gap for expansion at all walls and vertical surfaces. This gap will be covered last of all.

Finishing Off:

Where skirting boards have been left in place, it is now time to fit colour matched scotia mouldings to the perimeter of the floor to cover the expansion gap after removing the expansion wedges. Scotia is to be pinned to the skirting only so as not to inhibit the free movement of the floor. If skirting boards have been removed or are yet to be fitted, they will usually cover the expansion gap well. It is often the case where professional installers will also undercut the plasterboard to afford an additional 12mm or so expansion to the perimeter of a floor. This is often recommended on areas of higher humidity where the flooring is likely to expand more. Install any end, connector or adaptor profiles that have not been fitted during the installation process. These trims must hold the floor in place and provide for full and free expansion of the flooring under or inside the trim profile. Finally, any gaps at the floor perimeter that could not be covered with skirting or profiles, can be filled at this time. Your Engineered Bamboo can now be cleaned and enjoyed.

If unsure at all, please contact your retailer. These instructions are only a guide.

Engineered Bamboo limited warranty

This Engineered Bamboo floor comes with a Life Time Structural Warranty & 20 Year Finish and Wear Warranty.

These warranties, which begin from the date of purchase, apply to products used in dry residential applications. Lifetime warranties apply for as long as the original purchaser owns and resides in the home where the product was installed.

Installation is installed in strict accordance with current written installation instructions.

Wet Areas are not suitable for installation in bathrooms, saunas, laundries or any other area in which high levels of steam and moisture are present.

Maintenance care guidelines must be adhered to.

Non-Assignment the warranty is limited to the original purchaser and may not be assigned or transferred.

Lifetime Structural Warranty

The manufacturer warrants its product from structural defects, de-lamination, cracking, warping, twisting or any other forms of structural deformation at the time of supply.

Installation instructions must be adhered to that the warranty applies. Please ask your retailer for these guidelines.

Exposure to excessive moisture caused in any way whatsoever such as flooding, spills, leaks, excessive wet mopping, steam mops, sub-floor moisture or heating may cause distortion within the board and will not be covered by this warranty.

Care should be taken to maintain even indoor humidity and temperature with good ventilation. Excessive heat, dryness or exposure to direct sunlight will cause damage to the goods and is considered negligence and is not covered by this warranty.

20 Year Limited Surface Warranty

From the date of purchase, the manufacturer warrants to the original purchaser only, that under normal domestic conditions of use, the surface will not wear through during the period warranted.

With proper maintenance, the goods will perform under normal household conditions. Scratches, dents, reduction of gloss (appearance reduction), damage caused by negligence, urine, animals or high heeled shoes. These are not considered as a defect and therefore not covered by this warranty. All furniture requires felt to be adhered to the underneath to protect the surface of your floor. From time to time this will need to be maintained and checked for wear.

A written notice must be received by the supplier within 30 days of discovery of any defect to be found, along with proof of purchase (date), the identity of wholesaler or retailer and the location of installation.

The supplier will acknowledge within 30 days the receipt of written notice and must be given the opportunity to inspect the floor prior to any repair or replacement to take place.

Warranty Exclusions

For the purpose of this warranty will be referred to as 'the supplier' Breach of Warranty Conditions - any breach of warranty conditions will void the warranty.

Colour Variations bamboo is a natural product and colour variation will occur between samples and what the supplier has delivered and installed. Samples displayed or provided are indicative only and within normal industry standards and no warranty is given that such samples will match the floor installed. Other variations will naturally occur such as small knots and grain variation. These variations normally present in bamboo are not considered defects and will not form the basis of any claim under warranty.

Extreme Conditions as bamboo is a natural product, the humidity level in the home must be in the 40%-60% range throughout the year, using humidifiers or dehumidifiers as appropriate.

Misuse the warranty doesn't extend to damage caused by moisture penetration through the sub floor, other flooding, leaking, plumbing, overflowing, hydrostatic pressure or any other water damage.

Alterations where floor or sub flooring has been altered, repaired, resurfaced or replaced, no warranty will apply except to the extent implied by law.

Insect Infestation the supplier warrants that it sells bamboo flooring free of insect infestation, this warranty does not cover any insect infestation occurring after the product has been sold.

Care instructions

Simple maintenance procedures will ensure your floor stays looking beautiful.

Sweep and vacuum as often as possible to remove any loose grit or dirt.

- Use protective mats at all exterior entrances.
- Use felt protectors under all furniture and quality chair mats under chairs with castors.
- Never slide or roll furniture or appliances across your floor. High heeled shoes or spiked shoes will cause damage to your floor.
- Avoid using excessive amounts of water, always use a well wrung out mop, if spills occur remove as quickly as possible. NEVER USE STEAM MOPS.
- Only use soap, wax, oil or other household products to clean your floor. Only use reputable floor cleaners, specific for your type of floor.
- Keep animal nails trimmed.

Under Floor Heating

- When installing over under floor heating system, ensure that the instruction of heating procedures is obeyed, before laying the floor.
- Floating floor laying instructions must be followed and plastic sheet/vapour barrier must first be fitted. The surface temperature from the underfloor heating must not exceed 27 degrees Celsius and the wattage should not exceed 60 watts/m².
- Turn on the heating system for at least 3 weeks prior to laying the floor and run at the desired temperature then switch off 48hrs before installation, the heating system can be started 1 week after the floor has been installed with gradual increases by 2 degrees increments each day until you reach the correct temperature and when turning off the heating system go down gradually by 2 degree increments each day until off.
- With 5G & 2G Click install with a good size bead of Cross Link PVA Glue applied to large click.
- With Tongue & Groove apply a bead of Cross Link PVA Glue to the top & bottom lip of the groove.

Laying the TUFF LOC 2G+5G System



Fig 1. First plank, first row. Place a spacer of 15mm thickness to the left and position the plank against the wall. Later, after 3 rows, you can easily position the flooring against the front wall with distances \approx 15mm.

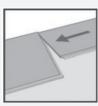


Fig 2. Second plank, first row place this plank gently and tight to the short end of the first one.

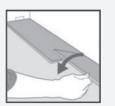


Fig 3. Fold the panel down in a single action movement. During the fold down, make sure the panels are tight against each other. Afterwards press down or slightly tap down at the short end just installed till it clicks. No major force is required.

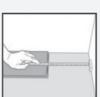


Fig 4. At the end of the first row, put a spacer ≈ 15mm, to the wall and measure the length of the last plank to fit.



Fig 7a. Second plank, second row place the panel at an angle into the groove of the previous row making sure that the end of the panel is tight/flush to the short end of the previous panel.

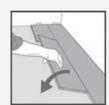


Fig 7b. Fold the panel down in a single action movement with a slight press to the left to the short end of the previous panel. Again using the tapping block tap it against the long end into the previous row. During the fold down, make sure the panels are tight against each other



Fig 7c. As it flattens itself to the floor, press or gently tap the top of the short end of the installed panel until it clicks. Finish installing this plank by tapping it with a tapping block on the long side to ensure secure installation.



Fig 8. After 2-3 rows, adjust the distance to the front wall by placing spacers \approx 15mm. Once the adjustment is done against the main wall, continue to install till the last row.

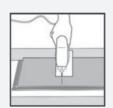


Fig 5. Cut with a jig saw - hardwood turned down to eliminate/ reduce damage to the face of the panel. Or if cutting using a hand saw, cut it with the hardwood visible face up. Then install it as previous plank.

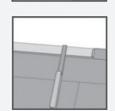


Fig 9. Last row (and perhaps also first row). The minimum width of the last plank should be NOT LESS than 50mm. Remember distance to wall is 15mm. TIP: Put a spacer before measuring. Cut the panels lengthwise and glue the short ends. See instructions below.

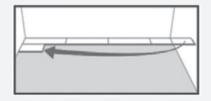


Fig 6. General distances between short ends Minimum distance between short ends of planks in parallel rows shall not be less than 500mm. This is for stability of the floor.